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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,080	09/18/2003	Michael P. Corcoran	C516.12-0006	8975

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312 SOUTH THIRD STREET  
MINNEAPOLIS, MN 55415-1002

EXAMINER

MENDOZA, MICHAEL G

ART UNIT	PAPER NUMBER
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3734

DATE MAILED: 04/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/666,080	Applicant(s) CORCORAN ET AL.	
	Examiner Michael G. Mendoza	Art Unit 3734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17, 19-33 and 35-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2, 3, 17 and 19-32 is/are allowed.
- 6) ☒ Claim(s) 1, 4, 6-9, 12, 15, 16, 33, 37 and 39-41 is/are rejected.
- 7) ☒ Claim(s) 5, 10, 11, 13, 14, 35, 36 and 38 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection. The applicant amended claim 1 to include the new limitation of a first set of arms and a second set of arms. The new limitation requires new consideration and an update search.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4, 7, 8, 33, 37, 40, and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Lock et al. 5451235.

4. As to claims 1, 7, and 8, Lock et al. teaches an occlusion device comprising: a left side having a first set of arms; a right side having a second set of arms, wherein the right side is spaced from and connected to the left side; and a self centering mechanism comprising at least three rings located between the left and right sides wherein: a first ring is connected to the left side; a second ring is connected to the first ring; a third ring is connected to the second ring and the to right side; wherein the rings comprise a non-thrombogenic material (col. 5, lines 22-26); wherein the comprise biocompatible wire (col. 5, lines 22-26); and a center post connecting the left side to the right side.

Art Unit: 3734

5. Claims 4 and 37 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lock et al.

6. Claims 4 and 37 are product-by-process claims. The claimed product appears to be the same or similar to that of the prior art, although produced by a different process. Product-by-process claims are not limited to the manipulation of the recited steps, only the structure implied by the steps.

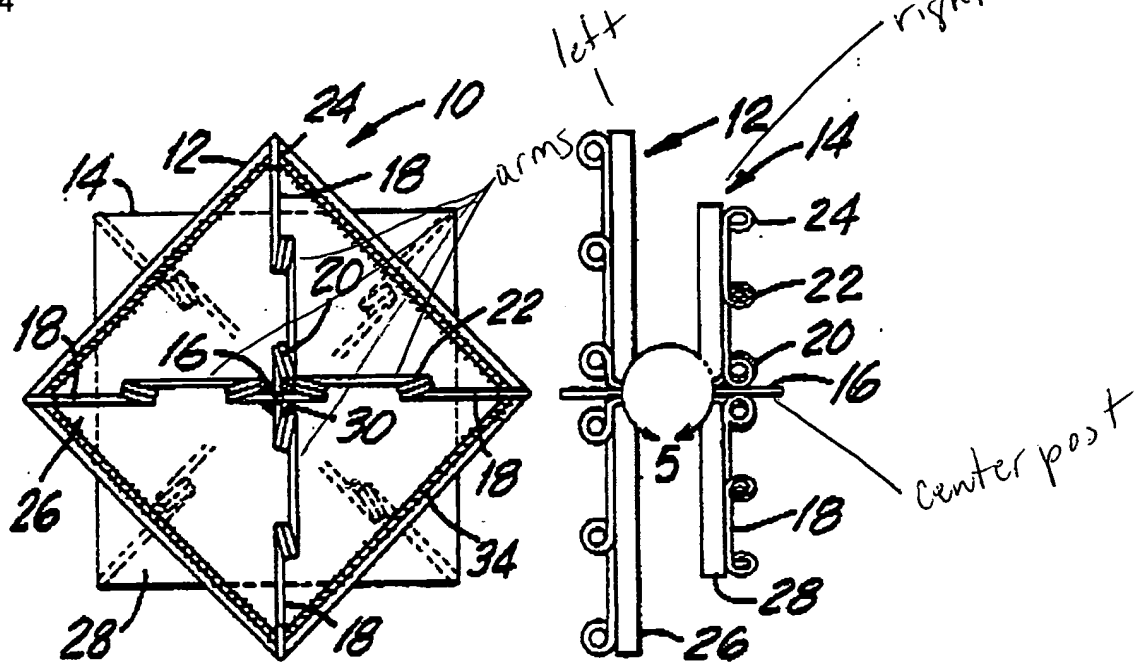


FIG. 1

FIG. 2

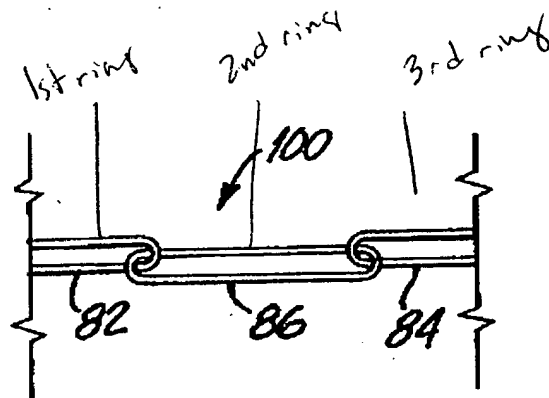


FIG. 5e

7. Claims 1, 4, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Khairkhan et al. US 2002/0111647 A1.

8. As to claims 1 and 7, Khairkhan et al. teaches an occlusion device comprising: a left side having a first set of arms; a right side having a second set of arms, wherein the right side is spaced from and connected to the left side; and a self centering

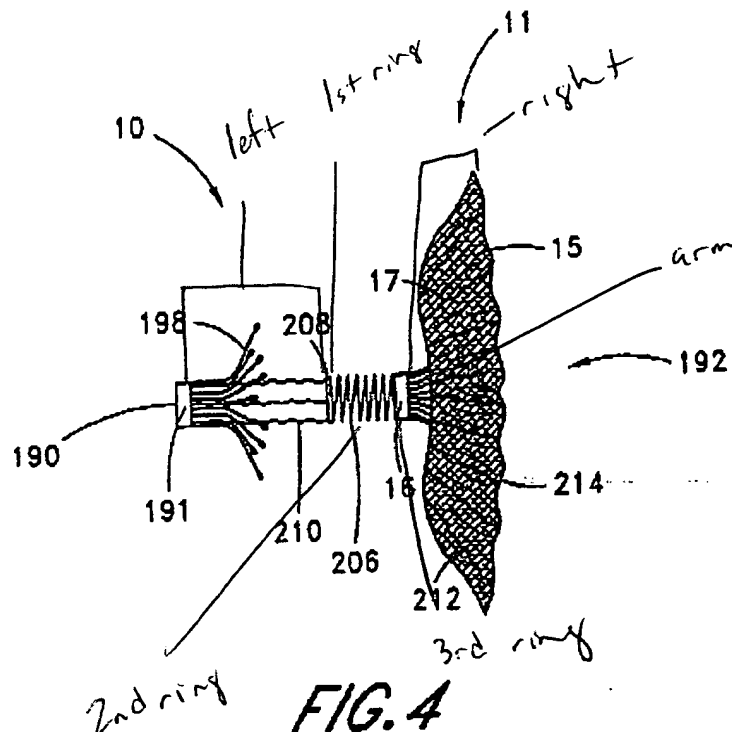
Art Unit: 3734

mechanism comprising at least three rings located between the left and right sides wherein: a first ring is connected to the left side; a second ring is connected to the first ring; a third ring is connected to the second ring and to the right side; and wherein the rings comprise a non-thrombogenic material.

9. Claim 4 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Khairkahan et al.

10. Claim 4 is a product-by-process claim. The claimed product appears to be the same or similar to that of the prior art, although produced by a different process.

Product-by-process claims are not limited to the manipulation of the recited steps, only the structure implied by the steps.



***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 6, 14, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lock et al. as evidenced by Schneidt 6174322

13. Lock et al. discloses the claimed invention except for the use of polyvinyl alcohol foam. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use polyvinyl alcohol foam, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use polyvinyl alcohol foam because it is well known in the art of treating septal defects to use polyvinyl alcohol foam as a suitable material for forming occlusion devices as evidenced by Schneidt 6174322.

14. Claims 9-12, 15, and 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Lock et al.

15. As to claim 9, Lock et al. discloses the claimed invention except for first and second sets of arms comprising at least five arms. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use at least five arms, since it has been held that mere duplication of the essential working parts of a

Art Unit: 3734

device involves only routine skill in the art. *St Regis Paper Co. v. Bemis Co.*, 193

UPSQ 8.

***Allowable Subject Matter***

16. Claims 2, 3, 6, 17, and 19-32 are allowable over the prior of record.

17. Claims 5, 10, 11, 13, 35, 36, and 38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

18. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to teach or render obvious the overall claimed invention of an occlusion device comprising: a center post; a first and second sets of arms connected to the center post, the first and second set of arms comprising at least five arm; and a self centering mechanism comprising a plurality of flexible rings wherein: a first ring is connected to the first set of arms; a second ring is connected to the first ring; a third ring is connected to the second ring and to the second set of arms; or a self centering mechanism comprising a flexible honeycomb structure surround the center post and connected between the first and second set of arms.

19. The indicated allowability of claim 6 and 9-16 are withdrawn in view of the newly discovered reference(s) to Lock et al. Rejections based on the newly cited reference(s) follow.



**Contacts**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael G. Mendoza whose telephone number is (571) 272-4698. The examiner can normally be reached on Mon.-Fri. 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jackson can be reached on (571) 272-4697. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



MM

3/29/2006

GARY JACKSON  
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GROUP 3300

  
4-20-2006